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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/659,164

09/10/2003

Eric Bacque

FRAV2002/0024 US NP

3744

5487

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10/06/2006

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EXAMINER

COPPINS, JANET L

ART UNIT

PAPER NUMBER

1626

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,164

Applicant(s)

BACQUE ET AL.

Examiner

Janet L. Coppins

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 19-24 is/are allowed.
- 6) ☒ Claim(s) 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-24 are pending in the instant application.

Information Disclosure Statement

2. Applicant's Information Disclosure Statement (IDS), filed December 4, 2003, has been considered by the Examiner. Please refer to the signed copy of Applicant's PTO-1449 forms submitted herewith.

Election/Restrictions

3. Applicant's election with traverse of Group I, claims 1-6 and 11, in the reply filed on September 11, 2006, is acknowledged. Accordingly, claims 7-10 and 12-24 are withdrawn from consideration as being drawn to non-elected subject matter. Applicants' traversal is on the ground(s) that the examination of the instant application does not impose a serious burden on the Examiner.

Following Examination of Group I, the compounds of formula (I) appear to be directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(B), claims 7-10 and 12-24, directed to a process of preparation, a process of using, and intermediate compounds of different formulae, previously withdrawn from consideration as a result of a restriction requirement, are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, **the restriction requirement as set forth in the Office action mailed on August 9, 2006, is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable

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in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

4. Accordingly, all claims are now pending in the application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 18 rejected under 35 U.S.C. 102(b) as being anticipated by Grethe, Guenter et al, Helvetica Chimica Acta. The journal article discloses the preparation of piperidinyl alkaloids, including the same compound of formula (VII) as recited in claim 18. Please refer to page 1487, compounds 10a-c, wherein Applicants' "Ra" would be alkyl, and "Rz" is benzoyl, a known amine-protecting group (10a-c are the following compounds: RN 26847-64-3; RN 26847-66-5; and RN 42881-64-1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al, WO 00/43383.

Applicants are claiming the following compounds:

Applicants are claiming piperidinyl-oxopropyl-quinolne compounds of formula (C).

Determining the scope and content of the prior art

Davies et al teach piperidinyl-oxopropyl-quinolne compounds having the same core structure as the instant compounds of formula (C), please refer to formula (I) of page 1. The compounds disclosed in the Davies et al document fully encompass the compounds of the instant invention and have the same utility, i.e. treating bacterial infections.

Ascertaining the difference between the prior art and the claims

The difference between the prior art and the claims is that Davies et al does not teach a specific disclosed compound or species that anticipates the instant claim.

Resolving the level of ordinary skill in the pertinent art

However, minus a showing of unobvious results, it would have been obvious to one of skill in the art to prepare the piperidinyl-oxopropyl-quinolines as instantly claimed since the prior art reference discloses a similar genus of piperidinyl-quinoline derivatives with the same antibacterial activity. Davies et al teach a larger genus of compounds that completely encompass the smaller genus that is instantly claimed as formula (C) in claim 17. One would be motivated to prepare the instantly claimed invention since the WO document has enabled and taught the broad scope of compounds in the many examples and formulae disclosed, for example in pages 23-40. The Examiner directs Applicant's attention to formula (I), defined in pages 1-6 wherein Z^1, Z^2, Z^3, Z^4 , are CH, Z^5 is CR^{1a} (wherein R^{1a} is halogen); R^1 is C_{1-6} alkoxy, R^3 is carboxy, hydroxyalkyl, or carboxyalkyl; R^4 is CH_2-R^5 wherein R^5 is phenyl or benzoyl (common amine protecting groups are benzyl or benzoyl); A is CR^6R^7 wherein R^6 and R^7 together represent oxo and B is CR^8R^9 wherein R^8 and R^9 are hydrogen; and n is 1.

Therefore, one skilled in the art would know to pick and choose from the various substituents disclosed and the same core piperidinyl-quinoline structure, as guided by Davies et al in formula (I), particularly when they possess the same activity and share the same utility of treating bacterial infections. Therefore, absent a showing of unobvious and superior properties, the instant claimed compounds of claim 17 would have been suggested to one skilled in the art.

Conclusion

11. In Conclusion, claims 1-24 are all pending in the application, and claims 17 and 18 stand rejected. Claims 1-16 and 9-24 appear allowable over the prior art.

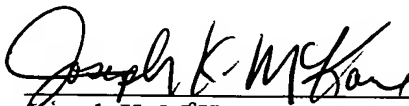
Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Coppins whose telephone number is 571.272.0680. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571.272.0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Janet L. Coppins
September 26, 2006



Joseph K. McKane
SPE, Art Unit 1626